

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
29 September 2005 (29.09.2005)

PCT

(10) International Publication Number
WO 2005/089539 A1

- (51) International Patent Classification⁷: **A01K 67/027**
- (21) International Application Number:
PCT/SE2005/000383
- (22) International Filing Date: 17 March 2005 (17.03.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
0400707-6 22 March 2004 (22.03.2004) SE
- (71) Applicant (for all designated States except US): **BIOARTIC NEUROSCIENCE AB** [SE/SE]; Uppsala Science Park, Box 105, S-751 03 Uppsala (SE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **NILSSON, Lars** [SE/SE]; Salagatan 7 A, S-753 30 Uppsala (SE). **LANNFELT, Lars** [SE/SE]; Vintertullstorget 28, S-116 43 Stockholm (SE). **GELLERFORS, Pär** [SE/SE]; Lagmansvägen 13, S-181 63 Lidingö (SE).
- (74) Agent: **DR LUDWIG BRANN PATENTBYRÅ AB**; Box 17192, S-104 62 Stockholm (SE).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **TRANSGENIC MODEL FOR ALZHEIMER'S DISEASE**

(57) Abstract: The present invention relates to a transgenic non-human animal expressing at least one transgene comprising a DNA sequence encoding a heterologous Amyloid Precursor Protein (APP) comprising at least the Arctic mutation (R693G) and a further AD (Alzheimer's disease) pathogenic mutation or a further transgene affecting AD pathogenesis, which results in increased amounts of intracellular soluble A aggregates, including A peptides. The present invention also relates to method of producing said transgenic animal, and to methods of screening for therapeutic or diagnostic agents useful in treatment or diagnosis of Alzheimer's disease.

WO 2005/089539 A1